

2. (Twice Amended) A method of processing signals at a receiver station, said receiver station having a plurality of processors, said method comprising the steps of:

receiving an information transmission containing a digital television signal and a message stream;

detecting said message stream in said information transmission;

selecting one message of said detected message stream;

inputting at least a first portion of said selected one message to a control processor;

selecting control information in said inputted first portion of said selected one message; [and communicating said selected control information to at least one register memory;]

[determining the length or format of at least one segment of said message stream on the basis of a plurality of comparisons at said at least one register memory;]

selecting and outputting [selected] under the control of said control processor, other portions of said message stream to said plurality of processors, based on said control information;

processing said selected other portions of said message stream simultaneously at said plurality of processors;

controlling the [reception or presentation] timing of communicating [of] television programming in accordance with said message stream; and

[metering or monitoring] storing information evidencing the availability, use or usage of said television programming or said message stream.

3. (Twice Amended) A method of processing signals at a receiver station, said receiver station having a plurality of processors, said plurality of

processors including a first control processor which controls a remainder of said plurality of processors based on a message stream, said method comprising the steps of:

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[(1)] receiving an information transmission containing a message stream at a transmission station;

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[(2)] generating a control portion of said message stream at said transmission station that is effective at a receiver station to cause said first control processor to select portions of said message stream that control said control processor and said remainder of said plurality of processors to perform different functions comprising (i) processing [to enable said receiver station to control the reception or presentation of] television programming and (ii) controlling the timing of communicating [meter or monitor the availability, use or usage of] said television programming [or said message stream]; and

[(3)] transmitting said message stream to be received at said receiver station.

4. (Twice Amended) A method of processing signals in a network, comprising the steps of:

[(1)]receiving an information transmission to be transmitted;

[(2)]receiving an instruct signal which is effective to one of:

(a) effect a transmitter station to generate at least a first message that is effective to enable a receiver station to control the reception or presentation of television programming and meter or monitor the availability, use or usage of said television programming or said at least a first message; [or] and

(b) effect a first receiver station to generate at least a first message that is effective to enable a second receiver station to control the

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reception or presentation of television programming and meter or monitor the availability, use or usage of said television programming or said at least a first message;

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[(3)]receiving a transmitter control signal which operates at one of said transmitter station and said first receiver station to communicate said at least a first message to a transmitter; and

[(4)]transmitting said information transmission, said instruct signal and said transmitter control signal.

5. (Unchanged) The method of claim 2, further comprising the step of programming said control processor to execute a controlled function in response to said one message.

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6. (Unchanged) The method of claim 5, further comprising the step of programming said control processor to compare information stored in at least a first of said at least one register memory with control function invoking information.

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7. (Once Amended) The method of claim 6, further comprising the step of programming said control processor to compare information stored in at least a second of said at least one register memory with information that identifies [the composition] a length or format of at least a portion of said one message.

no change
8. (Unchanged) The method of claim 2, wherein said at least one register memory includes an input signal register memory and said step of selecting control information in said inputted first portion of said selected one

message and communicating said selected control information to a plurality of registers memories comprises:

communicating said at least a first portion of said selected one message to said input signal memory;

selecting information at said input signal memory to compare or communicate; and

communicating said control information to at least a second of said at least one register memory.

9. (Unchanged) The method of claim 8, further comprising the step of communicating at least one of said other portions of said message stream to said input signal register memory.

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10. (Unchanged) The method of claim 2, further comprising the step of controlling a switch to output at least one of said selected other portions of said message stream to a specific one of said plurality of processors.

11. (Unchanged) The method of claim 10, further comprising the step of controlling said switch to communicate said at least one of said selected other portions of said message stream from one of (1) said control processor and (2) a buffer that inputs to said control processor.

12. (Unchanged) The method of claim 10, wherein said switch outputs said at least one of said selected other portions to said control processor.

13. (Unchanged) The method of claim 10, wherein said switch outputs said at least one of said selected other portions to one of a signal processor and a central processor.

14. (Unchanged) The method of claim 10, further comprising the step of programming said control processor to control said switch based on information contained in said message stream.

15. (Unchanged) The method of claim 14, further comprising the steps of:

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programming said control processor with comparison information to serve as a basis for determining the length or format of said at least one segment of said message stream; and

programming said control processor to compare information stored at said at least one register memory to said comparison information.

16. (Unchanged) The method of claim 14, wherein said control processor and said switch are located on a single microchip.

17. (Unchanged) The method of claim 2, wherein said control processor receives said at least a first portion of said message from a first of said plurality of processors and controls outputting to a second of said plurality of processors.

18. (Unchanged) The method of claim 17, wherein said first processor performs one of (1) converting information detected in said message stream based on protocols and (2) assembling processor code based on information detected in said message stream, said message further comprising the step of

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communicating machine language code to said second processor in said selected other portions of said message stream.

19. (Once Amended) The method of claim 2, wherein [said control processor controls] a decryptor [to decrypt] decrypts at least some of said message stream, said method further comprising the step of outputting one or more of said selected other portions of said message stream to said decryptor.

20. (Once Amended) The method of claim 19, further comprising the steps of:

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[decrypting] selecting at least a portion of said message stream; and
controlling said decryptor in accordance with said [decrypted] selected at least a portion of said message stream.

21. (Once Amended) The method of claim 20, wherein said [decrypted] selected at least a portion of said message stream comprises a decryption key.

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~~22.~~ (Unchanged) The method of claim 21, further comprising the step of decrypting at least some of said digital television signal in accordance with said decryption key.

23. (Unchanged) The method of claim 19, further comprising the steps of:

storing a decrypted portion of said at least some of said message at some or all of said at least one register memory; and
processing decrypted portions of said message stream simultaneously.

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24. (Unchanged) The method of claim 23, further comprising the step of decrypting processor code contained in said message stream.

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25. (Once Amended) The method of claim 2, wherein a standard [identifies] informs said receiver station of a signal to be processed, said method further comprising the step of [identifying] evaluating at least some of said selected one message based on said standard.

26. (Once Amended) The method of claim 25, wherein further comprising the step of:

storing at least a portion of said standard at one or more of a Standard Word and a Standard Length memory; and

programming said receiver station to compare data received in said information transmission to information contained at said one or more of a Standard Word and a Standard Length memory.

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27. (Unchanged) The method of claim 25, wherein said receiver identifies, based on said standard, one of (1) an end of a prior message and (2) a header in said selected one message.

28. (Unchanged) The method of claim 25, further comprising the step of causing said control processor to process an interrupt signal based on said standard.

29. (Unchanged) The method of claim 2, further comprising the step of programming said receiver station to communicate a processor interrupt signal to at least one of said plurality of processors.

30. (Unchanged) The method of claim 29, wherein two or more of said plurality of processors are adapted to communicate or respond to processor interrupt signals, said method further comprising the step of programming said receiver station to select at least one of said two or more processors to interrupt.

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31. (Unchanged) The method of claim 30, wherein said control processor selects said at least one of said two or more processors, said method further comprising the steps of:

detecting a processor interrupt signal in said information transmission;
and
inputting said processor interrupt signal to said control processor.

32. (Unchanged) The method of claim 2, wherein said receiver station includes a video monitor and a first of said plurality of processors generates a video signal to be displayed as part of said television programming, said method further comprising the step of outputting to said first processor a first of said selected other portions of said message stream which causes said first processor to communicate said video signal to said video monitor.

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~~33. (Once Amended) The method of claim 32, wherein said receiver station includes a speaker and a second of said plurality of processors [to] generates an audio signal containing audio to be emitted as part of said television programming, said method further comprising the step of outputting~~

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to said second processor a second of said selected other portions of said message stream which causes which causes said second processor to communicate said audio signal to said speaker.

no change
34. (Unchanged) The method of claim 33, wherein said receiver station includes one or more of a tuner and a portion receiver and a third of said plurality of processors is adapted to control said one or more of a tuner and a portion receiver, said method further comprising the step of programming said third processor to control said one or more of a tuner and a portion receiver based on information contained in said selected other portions of said message stream.

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35 (Once Amended) The method of claim 2, wherein at least one of said selected other portions of said message stream contains first processor code that controls at least one of said plurality of processors to generate information content of one or more video or audio signals, said method further comprising the steps of:

selecting second processor code contained in said selected one message;
and

communicating said first processor code in accordance with said second processor code.

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36. (Unchanged) The method of claim 35, wherein said second processor code programs said control processor to select control information in said message stream and communicate said selected control information to said at least one register memory, said method further comprising the step of

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processing control information of a new composition and/or length in accordance with said second processor code.

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37. (Once Amended) The method of claim 2, wherein [said] a second receiver station includes a second plurality of processors, said method further comprising the steps of:

receiving said information transmission at a signal generator operatively connected to a transmitter;

generating (1) first cadence information which is effective at said receiver station to execute a predetermined instruction, and (2) at least one message element containing one or more instructions to be directed to a specific one of said second plurality of processors; and

embedding said cadence information and said at least one message element in said information transmission; and

communicating said information transmission, said cadence information and said at least one message element to said transmitter.

38. (Once Amended) The method of claim 37, wherein [said specific processor] one of said second plurality of processors includes a plurality of register memories, said method further comprising the steps of:

communicating to said signal generator second cadence information which operates at said plurality of [dedicated] register memories to select a portion of one message of said message stream.

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39. (Unchanged) The method of claim 37, wherein said signal generator embeds said generated message stream in said information

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transmission, said method further comprising the step of communicating said television programming to said transmitter in said information transmission.

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~~40. (Once Amended) The method of claim 37, wherein said second receiver station includes one of a tuner and a portion receiver operatively connected to said second plurality of processors, said method further comprising the steps of:~~

~~[generating] transmitting an instruction which operates at said receiver station to control said one of said tuner and said portion receiver to receive a signal containing at least some of said television programming; and transmitting said television programming.~~

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~~41. (Once Amended) The method of claim 3, further comprising the steps of:~~

~~generating a first instruction specifying a control function to be executed; generating a second instruction specifying a data structure, length, or format;~~

~~organizing said first and second instructions in a sequence, said sequence comprising a command; and~~

~~communicating to [said] a signal generator [second] cadence information which operates at said [plurality of dedicated register] receiver station to select a portion of one message of said message stream.~~

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42. (Unchanged) The method of claim 41, further comprising the steps of:

processing data specifying a condition which must exist at said receiver station; and

including said data specifying a condition in said command.

43. (Unchanged) The method of claim 41, wherein said command operates at said receiver station to execute one or more instructions contained in an instruction set, said method further comprising the step of organizing said message stream to include said instruction set.

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44. (Unchanged) The method of claim 41, further comprising the step of transmitting operating instructions which enable said receiver station to execute said control function in response to said command.

45. (Unchanged) The method of claim 41, wherein said command operates at said receiver station to present one or more receiver specific data at an output device, said receiver specific data generated in accordance with said instruction set, said method further comprising the step of transmitting one or more of (1) subscriber transaction data to be stored and processed at said receiver station and (2) meter-monitor data.

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46. (Once Amended) The method of claim 41, further comprising the step of transmitting a signal which operates at said receiver station to communicate a processor interrupt to at least a portion of said plurality of processors.

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~~47. (Once Amended) The method of claim 46, further comprising the step of transmitting an instruction which operates at said receiver station to control [a first] one of said plurality of processor to [selected] select a second processor to be interrupted.~~

48. (Unchanged) The method of claim 3, further comprising the steps of:

selecting at least some of said television programming at said transmission station;

selecting meter-monitor data; and

organizing said message stream to include said selected at least some of said television programming and said selected meter-monitor data.

49. (Unchanged) The method of claim 4, wherein said at least a first message contains first cadence information, a first execution segment, and an information segment, said information segment containing a first part of data and an instruction set, said method further comprising the steps of:

generating one or more second messages, each of said second messages containing second cadence information and some other part of said data and an instruction set;

organizing said first and second messages in a sequence, said sequence comprising a message stream; and

transmitting said message stream.

50. (Once Amended) A method of claim 4, wherein said at least a first message contains multiple elements of fixed length, said first message including an information segment containing an instruction set, said method further comprising the steps of:

generating a second message containing multiple elements of fixed length, said multiple elements comprising a command;

firstly embedding said first message into an information transmission;

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~~subsequently embedding said second message into said information transmission, said first message firstly and said second message subsequently in said information transmission comprising [said] a message stream; and transmitting said information transmission.~~

51. (Unchanged) The method of claim 4, wherein at least one receiver station includes a plurality of processors, said method further comprising the steps of:

selecting code to be directed to said plurality of processors;
generating one or more first elements or fields to identify a structure of said at least a first message;
generating one or more second elements or fields to identify one or more processor instructions in said at least a first message;
generating one or more third elements or fields to identify a data format in said at least a first message; and
organizing said selected code in a sequence with a plurality of message components, said sequence including said generated first, second, and third elements or fields, said selected code organized in said sequence with said plurality of message components and said generated first, second, and third elements or fields comprising said at least a first message.

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52. (Once Amended) The method of claim 4, further comprising the steps of:

~~generating a first instruction specifying a control function to be executed;
generating a second instruction specifying a data structure, length, or format;~~

processing data specifying a condition, said data in said structure, length, or format specified by said second instruction;

organizing said first and second instructions and said processed data in a sequence, said sequence comprising [said] a command;

transmitting said at least a first message and said command.

53. (Once Amended) The method of claim 4, further comprising the steps of:

receiving said information transmission at a signal generator operatively connected to said transmitter;

generating one or more second messages, said one or more second messages containing multiple elements of [both] fixed and variable length, said one or more second messages including (1) cadence information which is effective at one or more receiver stations to execute a predetermined instruction and (2) at least one variable length element containing one or more instructions to be directed to a processor;

embedding said second message into said first information transmission in a [first] sequence with said first message, said first message and said second message in said first information transmission in said [first] sequence comprising a message stream; and

transmitting said information transmission and said message stream.

54. (Unchanged) The method of claim 53, further comprising the step of transmitting at least some of said television programming.